

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at the intersection of MD 97 (Roxbury Mills Road) and Carrs Mill Road/McKendree Road in Howard County, Maryland. MD 97 is considered to run in a north/south direction.

II. INTERSECTION OPERATION

The intersection currently operates in a NEMA four (4) phase, full-traffic-actuated mode. The MD 97 through movements operate concurrently with a concurrent audible pedestrian movement across the west leg of the intersection. The Carrs Mill Road/McKendree Road through movements operate concurrently with an actuated pedestrian movement across the north leg of the intersection.

The existing cabinet/controller to be utilized. Video detection equipment, and audible pedestrian equipment to be installed at this location.

CONTACT LIST

The contact persons for District #7 are as follows:

Mr. John Concannon
Assistant District Engineer - Traffic
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Mr. Andrea Abend
Assistant District Engineer - Utility
301-624-8115

Mr. Ray Jackson
Assistant District Engineer - Maintenance
301-624-8105

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7630

Mr. Ed Rodenhizer
Office of Traffic Signal Shop Operations
410-787-7652

EQUIPMENT LIST

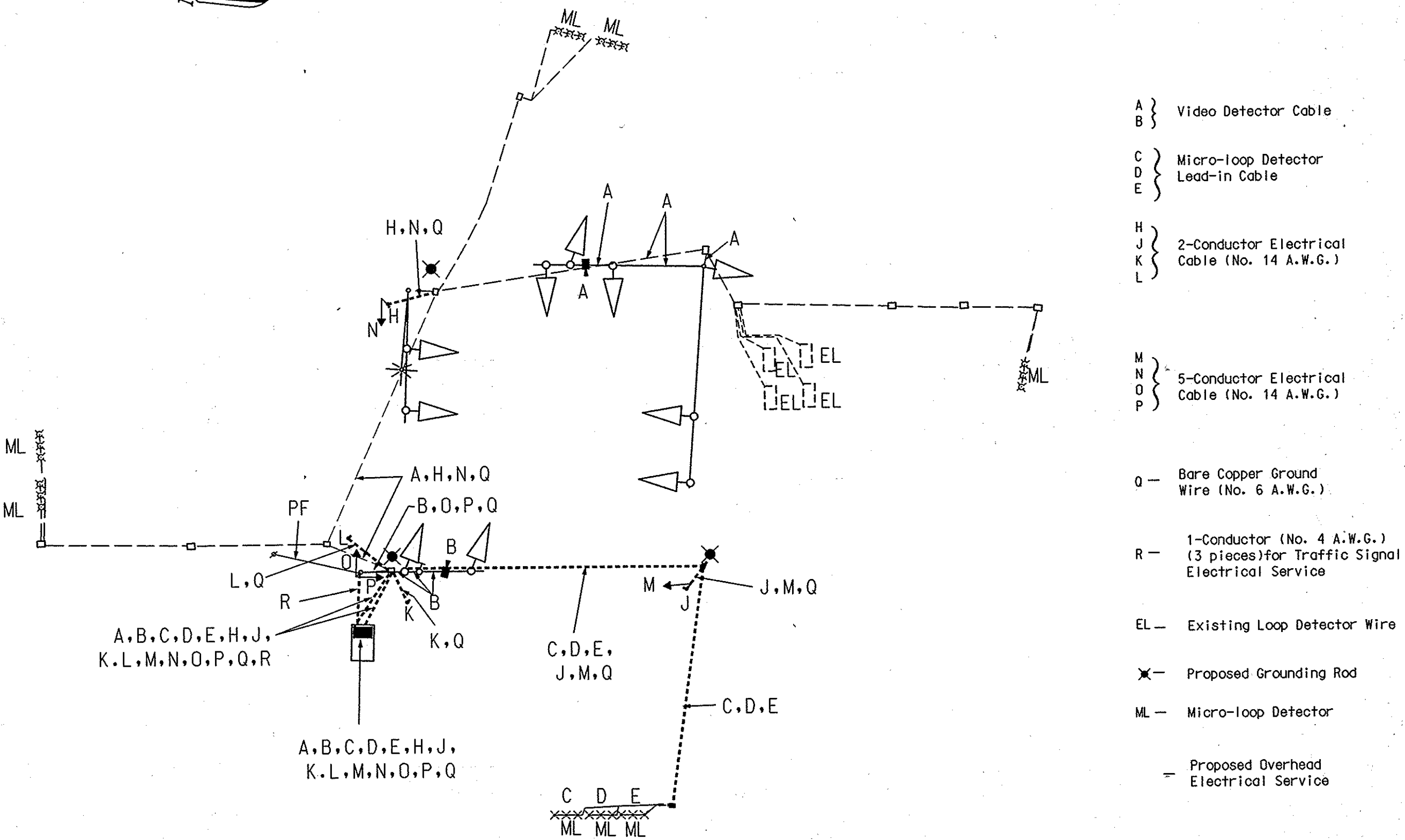
Equipment to be furnished and installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description	Quantity	Units	Specification Section	Description
2	EA	818	5 ft. steel pedestal pole for pushbutton assembly with break away transformer base.	Lump Sum	LS	108	Mobilization.
2	EA	818	10 ft. steel pedestal pole with break away transformer base	Lump Sum	LS	104	Maintenance of traffic.
1	EA	814	16 in., two-way, one section (LED) (countdown indications) adjustable pedestrian signal head with pole mounting hardware and cut-away visors.	4	EA	205	Test Pit.
2	EA	814	16 in., one way, one section (LED) (countdown indications) adjustable pedestrian signal head with post top mounting hardware.	2	EA	811	Handhole.
1	EA	---	Central control unit for audible pedestrian pushbuttons.	85	LF	815	Sawcut for signal loop detector.
1	EA	---	Video Detector Interface Panel.	50	LF	810	1-conductor electrical cable (No. 4 A.W.G.).
2	EA	---	Video Detection Camera and cable (1-300 LF, 1-100 LF)	325	LF	810	2-conductor electrical cable (No. 14 A.W.G.).
1	EA	813	30 in. x 36 in. R 3-5(R) sign for mast arm mounting.	325	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
1	EA	813	30 in. x 36 in. R 3-5(L) sign for mast arm mounting.	125	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
1	EA	813	24 in. x 51 in. Shield Assem sign with ground mounting hardware.	15	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
4	EA	817	9 in. x 15 in. R10-4(1) MOD pedestrian education sign.	170	LF	805	2 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
4	EA	817	APS (audible Pedestrian Signal) pushbutton station and sign.	20	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - trenched.
3	EA	---	Micro-loop probe (set of 3) with 500 ft. lead-in cable.	80	LF	805	4 in. polyvinyl chloride (Schedule 80) electrical conduit - bored.
				5.5	CY	801	Concrete foundation for traffic signal equipment.
				3	EA	804	Ground rod - 3/4 in. diameter x 10 ft. length.
				1	EA	---	Relocate existing ground mounted sign.
				1	EA	---	2 in. PVC elbow in existing pole base.
				Lump Sum	LS	---	Remove and dispose of existing signal equipment.
				Lump Sum	LS	---	Relocate existing cabinet and rerun cables to new cabinet location.
				Lump Sum	LS	---	As-built for S.H.A. (on CADD).

Phase Chart

	1	2	3	4	5	6	7	8	9	10	11,12	13,14
Phase 2 & 6	G	G	G	G	G	R	R	R	R	R	WK	DW
Ped Clearance	G	G	G	G	G	R	R	R	R	R	FL/DW	DW
2 & 6 Change	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW
Phase 4 & 8	R	R	R	R	R	G	G	G	G	G	DW	DW
4 & 8 Change	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW
Phase All 4 & 8	R	R	R	R	R	G	G	G	G	G	WK	WK
Ped Clearance	R	R	R	R	R	G	G	G	G	G	DW	FL/DW
All 4 & 8 Change	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

Wiring Diagram



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
**MD 97 (Roxbury Mills Road)
at Carrs Mill Road/McKendree Road**

APPROVALS	REVISIONS	GENERAL INFORMATION PLAN	
TEAM LEADER		SCALE <u>N/A</u>	DATE <u>Nov. 27, 2006</u> CONTRACT NO. <u>BW-996M82</u>
ASST. DIV. CHIEF		DESIGNED BY <u>Frank Hoeckel</u>	COUNTY <u>Howard</u>
DIVISION CHIEF		DRAWN BY <u>Frank Hoeckel</u>	LOGMILE <u>13009705.10</u>
OFFICE DIRECTOR		CHECKED BY <u></u>	T.I.M.S. NO. <u>H-823</u>
		F.A.P. NO. <u>AC-STPG-0005(69) E</u>	TDD NO. <u>3744 C</u>
		DRAWING NO. <u>TS -3744C GI</u>	SHEET NO. <u>2</u> OF <u>2</u>